

What is claimed is:

1. A method for managing a plurality of proximity service systems, comprising the steps of:
 - storing in a proximity service provider computer system a plurality of proximity service codes, each proximity service code being uniquely associated with one or more proximity service systems, each proximity service system providing a predetermined service in response to receiving an authorization code from a proximity authorization unit;
 - providing access to the proximity service codes stored in the proximity service provider computer system to a customer;
 - receiving from the customer the customer's selection of one or more of the proximity service codes stored in the proximity service provider computer system by inputting a customer code uniquely identifying the



particular customer and an identification of the
selected proximity service codes; and

providing to the customer by the proximity service

provider computer system a proximity authorization

code unique to the customer for the selected

proximity service code and unique for the selected

proximity authorization unit and a system customer code

uniquely identifying the customer, the proximity

authorization code permitting the customer to

operate proximity service systems associated with

the proximity service code by outputting the

proximity authorization code by the customer using

the customer's proximity authorization unit for

activating one of the proximity service systems

associated with the selected proximity service codes

to provide the predetermined service.

2. The method of claim 1, further comprising the steps of:
displaying to the customer a list of proximity authorization
units by the proximity service provider computer
system that are available to authorize the proximity
service systems associated with the selected
proximity service codes; and
receiving from the customer the customer's selection of at
least one of the displayed proximity authorization
units.

3. The method of claim 1, further comprising the step of
establishing the proximity service provider computer system as a
web site on the Internet.

4. The method of claim 1, further comprising the step of
receiving information, by the proximity service provider computer
system, from the proximity service systems indicating usage of the
proximity service systems, the information including proximity

authorization codes identifying the customers using the proximity service systems, and proximity service codes identifying the proximity service systems.

5. The method of claim 4, further comprising the steps of collecting money from a third party based on the information received by the proximity service provider computer system indicating usage of the proximity service systems; and placing the money into a predetermined account of an owner of at least some of the proximity service systems.

6. The method of claim 5, wherein the third party is a legacy card company.

7. The method of claim 4, wherein at least some of the proximity service systems are owned by a first owner, and at least some of the proximity service systems are owned by a second owner, and wherein the method further comprises the steps of outputting a

statement for the first owner indicative of usage of the proximity service systems owned by the first owner, and outputting a statement for the second owner indicative of usage of the proximity service systems owned by the second owner.

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8. The method of claim 7, further comprising the step of outputting a statement for each customer identified by the proximity authorization codes received by the proximity service provider computer system indicating usage of the proximity service systems.

9. The method of claim 8, wherein in the step of outputting the statement, the statement includes the location of the proximity service systems providing the predetermined services, the amounts paid, and the dates of the providing of the predetermined services.

10. The method of claim 4, further comprising the step of outputting a statement for each customer identified by the proximity authorization codes received by the proximity service provider computer system indicating usage of the proximity service systems.

11. The method of claim 10, wherein in the step of outputting the statement, the statement includes the location of the proximity service systems providing the predetermined services, the amounts paid, and the dates of the providing of the predetermined services.

12. The method of claim 1, further comprising the steps of:
providing access to the proximity service codes stored in
the proximity service provider computer system to
an operator;

5 receiving from the operator the operator's selection of one
or more of the proximity service codes stored in the
proximity service provider computer system by
inputting an identification of the selected proximity
service codes.

13. The method of claim 12, further comprising the step of
receiving information, by the proximity service provider computer
system, from the proximity service systems indicating usage of the
proximity service systems, the information including proximity
5 authorization codes identifying the customers using the proximity
service systems, and proximity service codes identifying the
proximity service systems.

14. The method of claim 13, wherein at least some of the proximity service systems are registered to be operated by a first operator, and at least some of the proximity service systems are registered to be operated by a second operator, and wherein the method further comprises the steps of outputting a statement for the first operator indicative of usage of the proximity service systems operated by the first operator, and outputting a statement for the second operator indicative of usage of the proximity service systems operated by the second operator.

15. The method of claim 1, wherein the proximity service systems are selected from a group of proximity service systems comprising access services, vending machine services, vehicle services, meter services, audio and/or video communication services, and toll services.

16. The method of claim 1, wherein an owner of the proximity service provider computer system guarantees payment to an owner of at least one of the proximity service systems when the proximity service system owned by the owner is operated by a proximity authorization code provided to the customer by the proximity service provider computer system.

17. The method of claim 1, wherein in the step of storing in the proximity service provider computer system the plurality of proximity service codes, the proximity service provider computer system is defined further as a plurality of Web sites established on the Internet.

18. The method of claim 17, wherein in the step of storing in the proximity service provider computer system the plurality of proximity service codes, each of the Web sites is directed to providing services for at least one type of proximity service system selected from the group comprising access services, vending machines

services, vehicle services, meter services, audio and/or video communications services, and toll services.

19. The method of claim 1, further comprising the steps of:

5 providing access to a plurality of individualized

predetermined payment methods to the customer;

receiving from the customer the customer's selection of

one or more of the individualized predetermined

payment methods.

20. The method of claim 1, wherein before the step of providing access to the proximity service codes, the method further comprises the steps of:

providing access to a plurality of individualized

5 predetermined payment methods to the customer;

receiving from the customer the customer's selection of

one or more of the individualized predetermined

payment methods;

and wherein the step of providing access to the proximity
service codes is defined further as providing access
to selected proximity service codes stored in the
proximity service provider computer system to the
customer based on the customer's selection of the
individualized predetermined payment methods.

21. The method of claim 1, further comprising the steps of:
providing access to a plurality of individualized
predetermined payment methods to an owner of
proximity service systems; and
receiving from the owner of the owner's selection of one
or more of the individualized predetermined
payment methods.

22. The method of claim 21, wherein at least one of the individualized predetermined payment methods are PSPS cyber card codes for permitting local authorization of transactions at the proximity service system.

23. The method of claim 21, further comprising the step of outputting a cyber card code to be at least one of incorporated into and stored by selected proximity service systems associated with the owner.

24. A method for authorizing a proximity service system to provide a predetermined service without obtaining remote authorization for each transaction, comprising the steps of:

storing, by the proximity service system, a service provider identification number and a cipher algorithm;

receiving, by the proximity service system, a customer access cyber card code;

processing, by the proximity service system, the customer
access cyber card code with the cipher algorithm to
produce a code;
comparing, by the proximity service system, the service
5 provider identification number with the code; and
providing, by the proximity service system, the
predetermined service if the service provider
identification number corresponds with the code in a
predetermined manner.

25. A local authorization system comprising:
a plurality of proximity authorization units, each proximity
authorization unit capable of storing and outputting
a unique request authorization code;
5 a proximity service provider providing a unique request
authorization code to each of the proximity
authorization units and each of the proximity

authorization units storing the request authorization
code provided by the proximity service provider, the
request authorization code including a proximity
service provider code and a customer code, the
proximity service provider code uniquely identifying
the proximity service provider providing the request
authorization code to the proximity authorization unit
and the customer code uniquely identifying a
particular customer, the request authorization
codes provided to the proximity authorization units
being encrypted with a private key associated with
the proximity service provider;

a plurality of proximity service units, each proximity
service unit providing a predetermined service when
activated in response to receiving and validating the
request authorization code from one of the proximity
authorization units, each proximity service unit
receiving and storing a public key and the proximity

service provider code from the proximity service provider, each proximity service unit validating each request authorization code received from one of the proximity authorization units by decrypting the request authorization codes with the public key and comparing the proximity service provider code received by the proximity service unit from the proximity service provider with the proximity service provider code decrypted from the request authorization codes received from the proximity authorization units, the proximity service unit providing the predetermined service upon matching the proximity service provider code received by the proximity service unit with the proximity service provider code decrypted from the request authorization code received from the proximity authorization unit.

26. A proximity service provider system for managing a plurality of proximity service systems, the proximity service provider system comprising:

at least one PSPS Web site established on the Internet,

the PSPS Web site comprising:

an owner database server receiving an owner's

offering of proximity service systems, including

a physical location for each proximity service

system, a payment method for each proximity

service system and a financial location for

depositing money collected from usage of the

proximity service systems, each of the

proximity service systems being identified by a

stored proximity service code, the payment

method selected by the owner for each

proximity service system serving as a

predetermined payment method for the

particular proximity service system;

a customer database server permitting a customer

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to select proximity service systems identified

by the stored proximity service codes in the

owner database server, the customer

database server receiving a customer's

selection of proximity service systems offered

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by the owner of the proximity service systems,

the customer's selection including a selection

of a payment method from the predetermined

payment methods for each proximity service

system selected by the customer.

27. The proximity service provider system of claim 26,
wherein the PSPS Web Site is constructed by a method comprising
the steps of:

5 providing a master operating software system designed by the
steps of:

10 providing, first, a design matrix having at least two axes with the
system application programs being represented on one of
the axes, and user requirement elements for providing
services to at least two of users of proximity services,
owners of proximity services, operators of proximity
services and financial services being represented by
another one of the axes, the system application programs
each defining a particular technology, and each of the
15 user requirement elements defining a particular user
requirement;

locating one unique intersection point between each of the user
requirement elements represented on one of the axes and

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the system application programs represented by another
one of the axes in the design matrix; and
developing a technology converter requirement for each
intersection point, each technology converter requirement
using the system application program at each intersection
point to develop an output satisfying the user requirement
element at the corresponding intersection point.

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28. The proximity service provider system of claim 26,
wherein the owner database server receives information from the
proximity service systems indicating usage of the proximity service
systems, the information including proximity authorization codes
identifying the customers using the proximity service systems, and
proximity service codes identifying the proximity service systems.

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29. The proximity service provider system of claim 28, further comprising the steps of collecting money from a third party based on the information received by the owner database server indicating
5 usage of the proximity service systems; and placing the money into the financial location designated by the owner of at least some of the proximity service systems.

30. The proximity service provider system of claim 29, wherein the third party is a legacy card company.

31. The proximity service provider system of claim 28, wherein at least some of the proximity service systems are owned by a first owner, and at least some of the proximity service systems are owned by a second owner, and wherein the owner database server
5 outputs a statement for the first owner indicative of usage of the proximity service systems owned by the first owner, and outputs a statement for the second owner indicative of usage of the proximity service systems owned by the second owner.

10 32. The proximity service provider system of claim 28,
wherein the customer database server outputs a statement for each
customer identified by the proximity authorization codes received by
the owner database server indicating usage of the proximity service
systems.

33. The proximity service provider system of claim 26, further
comprising an operator database server permitting an operator to
select proximity service systems identified by the stored proximity
service code in the owner database server.

5 34. The proximity service provider system of claim 33,
wherein the operator database server receives information from the
proximity service systems indicating usage of the proximity service
systems, the information including proximity authorization codes
identifying the customers using the proximity service systems, and
proximity service codes identifying the proximity service systems.

35. The proximity service provider system of claim 34,
wherein at least some of the proximity service systems are registered
to be operated by a first operator, and at least some of the proximity
service systems are registered to be operated by a second operator,
5 and wherein the operator database server outputs a statement for the
first operator indicative of usage of the proximity service systems
operated by the first operator, and outputs a statement for the second
operator indicative of usage of the proximity service systems
operated by the second operator.

36. The proximity service provider system of claim 35, wherein
the proximity service systems are selected from a group of proximity
service systems comprising access services, vending machine
services, vehicle services, meter services, audio and/or video
5 communication services, and toll services.

37. A master integrated technology system, comprising:
a computer platform having at least one computer platform
operating systems program;
at least two system application programs installed
on the computer platform with the system
application programs programmed to run on
the computer platform; and
a master operating software system designed by the
steps of:
providing, first, a design matrix having at least two
axes with at least one predetermined
technology element being represented on one
of the axes, and user requirement elements
for providing services to at least two of users
of proximity services, owners of proximity
services, operators of proximity services and
financial services being represented by
another one of the axes, the predetermined

technology elements each defining a particular technology, and each of the user requirement elements defining a particular user requirement;

30 locating one unique intersection point between each of the user requirement elements represented on one of the axes and the available technology elements represented by another one of the axes in the design matrix; and

35 developing a technology converter requirement for each intersection point, each technology converter requirement using the predetermined technology element at each intersection point to develop an output

40 satisfying the user requirement element at the corresponding intersection point;

the master operating software system comprising:

a master input/output system running on the
computer platform and using at least one of
the operating system programs, the master
input/output system automatically detecting
each of the system application programs
installed on the computer platform, and
selectively providing user information to the
system application programs so that the
system application programs configure
themselves into a predetermined
configuration;

a master element manager running on the computer
platform and using at least one of the
operating systems programs, the master
element manager capable of controlling the
system application programs when the system
application programs are in the pre-
determined configuration and the master

element manager, upon activation, providing predetermined user information to one of the system application programs to control the system application program; and

65 a master user interface manager system having a user requirement database and communicating with the master element manager such that, upon activation, the master user interface manager instructs the master element manager to provide pre-70 determined user information to at least a predetermined portion of at least one of the system application programs whereby in response, the system application programs outputs identified user information to the master user interface manager requirement75 database.

38. The master integrated technology system of claim 37 wherein at least one of the operating system platforms is an intranet platform.

39. The master integrated technology system of claim 37 wherein at least one of the application programs is located on the Intranet.

40. The master integrated technology system of claim 37 wherein at least one of the operating system platforms is an Internet platform.

41. The master integrated technology system of claim 37 wherein at least one of the application programs is located on the Internet.

42. A master integrated technology system, comprising:
- a computer platform having at least one computer platform operating systems program;
 - at least two system application program installed on the computer platform with the system application programs programmed to run on the computer platform; and
 - a master operating software system designed by the steps of:
 - providing, first, a design matrix having at least two axes with at least one predetermined technology element being represented on one of the axes, and user requirement elements for providing services to at least two of users of proximity services, owners of proximity services, operators of proximity services and financial services being represented by another one of the axes, the predetermined

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technology elements each defining a particular technology, and each of the user requirement elements defining a particular user requirement;

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locating one unique intersection point between each of the user requirement elements represented on one of the axes and the available technology elements represented by another one of the axes in the design matrix; and

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developing a technology converter requirement for each intersection point, each technology converter requirement using the predetermined technology element at each intersection point to develop an output satisfying the user requirement element at the corresponding intersection point;

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the master operating software system program, comprising:

a master input/output system running on the
computer platform and using at least one of
the operating system programs, the master
input/output system automatically detecting
each of the programs installed on the
computer platform; and
a master element manager running on the computer
platform and using at least one of the
operating systems programs, the master
element manager capable of controlling the
system application programs when the system
application programs are in the pre-
determined configuration and the master
element manager, receiving commands from
the master input/output system to control the
system application program in a manner that
satisfies predetermined user requirements ;
and

a master user interface manager system having a
user requirement database manger capable of
receiving and storing user requirement
information from the master element manager
and communicating with the user by
predetermined activation methods such that,
upon activation, the master user interface
manager system instructs the user
requirement database manger to provide pre-
determined user information to the user by
predetermined methods using the user
information that has been provided to the user
requirement database by the master element
manager from at least one of the system
application programs as directed by the
control command received by the master
element manager from the master input/output
system.

43. The master integrated technology system of claim 42 wherein at least one of the operating system platforms is an intranet platform.

44. The master integrated technology system of claim 42 wherein at least one of the application programs is located on the Intranet.

45. The master integrated technology system of claim 42 wherein at least one of the operating system platforms is an Internet platform.

46. The master integrated technology system of claim 42 wherein at least one of the application programs is located on the Internet.

47. A method for integrating a plurality of system application programs installed on a computer platform having at least one computer platform operating systems program, the method comprising the steps of:

providing a master operating software system designed by the steps of:

providing, first, a design matrix having at least two axes with the system application programs being represented on one of the axes, and user requirement elements for providing services to at least two of users of proximity services, owners of proximity services, operators of proximity services and financial services being represented by another one of the axes, the system application programs each defining a particular technology, and each of the user requirement elements defining a particular user requirement;

locating one unique intersection point between each of
the user requirement elements represented on one
of the axes and the system application programs
represented by another one of the axes in the
design matrix; and
developing a technology converter requirement for each
intersection point, each technology converter
requirement using the system application program
at each intersection point to develop an output
satisfying the user requirement element at the
corresponding intersection point.

48. A method for integrating a plurality of system application programs installed on a computer platform having at least one computer platform operating systems program, the method comprising the steps of:

5 detecting, automatically by a master input/output system,
each of the system application programs installed
on the computer platform;
providing, by a master element manager, user information
to the system application programs so that the
10 system application programs configure themselves
into a predetermined configuration;
providing, upon activation, predetermined user
information to one of the system application
programs to control the system application program
when the system application program is in the
15 predetermined configuration; and
outputting, by the system application program, identified
user information to a master user interface manager
requirement database in response to receiving the
20 predetermined user information.

49. A method for integrating a plurality of system application programs installed on a computer platform having at least one computer platform operating systems program, the method comprising the steps of:

5 detecting, automatically by a master input/output system,
each of the system application programs installed
on the computer platform; and
receiving, by a master element manager running on the
computer platform, commands from the master
10 input/output system to control the system
application program in a manner that satisfies
predetermined user requirements ; and
communicating, via a master user interface manager
system having a user requirement database
15 manager receiving and storing user requirement
information from the master element manager, pre-
determined user information to a user using the
user requirement information that has been

